

**From:** [Huling, Scott](#)  
**To:** [Tzhone, Stephen](#)  
**Subject:** RE: Arkwood comments, revised  
**Date:** Wednesday, July 08, 2015 12:32:46 PM

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Stephen,

Thanks for the chance to have input. Regarding the following comment to McKesson, I think there is an opportunity to communicate a broader aspect of the issue. It seems that the comment suggests there could be bypass beneath the sinkhole and therefore beneath the NCS, however, looking at the hydrogeo model from a 3-D perspective, there is ample opportunity for contaminated ground water to laterally bypass the NCS altogether. The original comment is in red, and the blue text is what is recommended for addition. Scott

The immobile porosity hypothesis is therefore unsubstantiated, and it is not known if bypass flow is occurring at elevations lower than the discharge point of New Cricket Spring, or if there is discharge to depth beneath the former sinkhole. The study did not have adequate monitoring points to evaluate dye flow paths in the subsurface; rather, samples were collected at known points of spring discharge. Overall, the dye study and previous ground water monitoring data provide limited evidence that NCS captures contaminated ground water leaving the Arkwood Superfund site. It is highly probable that contaminated ground water is bypassing NCS, both laterally and beneath the artesian spring. A contaminated ground water capture analysis is needed for the site that provides quantitative evidence that the contaminated ground water leaving the site is captured by NCS.

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**From:** Tzhone, Stephen  
**Sent:** Wednesday, July 08, 2015 12:06 PM  
**To:** Huling, Scott  
**Subject:** FW: Arkwood comments, revised

Scott, what are your thoughts on the revised comment #16 (see attached matrix)?

If you are good with the revision, then I'll finalize the matrix to the PRPs for the next steps in the dioxin reassessment.

Separately, Ted is summarizing the gw strategy on evaluating overall protectiveness (in the five year review) as we discussed and I plan to utilize that summary + your pictures for my discussion with mgmt.

Thanks,

Stephen L. Tzhone  
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**From:** Telisak, Theodore [<mailto:ttelisak@eaest.com>]

**Sent:** Thursday, July 02, 2015 11:35 AM

**To:** Tzhone, Stephen; Huling, Scott

**Cc:** Snyder, Jay

**Subject:** Arkwood comments, revised

Attached is the latest version of the Arkwood review comments. Comment No. 16 has been revised as we discussed on June 25.

**Ted Telisak, P.E.**

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